



Safety Data Sheet

Issue Date: 23-Feb-2011

Revision Date: 23-Nov-2015

Version 2

1. IDENTIFICATION

Product Identifier

Product Name Sweep

Other means of identification

SDS # MANA-009

Registration Number(s) EPA Reg. No. 66222-173
UN/ID No UN3077

Recommended use of the chemical and restrictions on use

Recommended Use EPA registered pesticide.

Details of the supplier of the safety data sheet

Manufacturer Address

Makhteshim Agan of North America, Inc.
3120 Highwoods Blvd., Suite 100
Raleigh, NC 27604
1-919-256-9300

Emergency Telephone Number

Emergency Telephone (24 hr) For fire, spill and/or leak contact INFOTRAC:
1-800-535-5053 (North America) 1-352-323-3500 (International)
For medical emergencies and health/safety inquiries, contact PROSAR:
1-877-250-9291

2. HAZARDS IDENTIFICATION

This chemical is a product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-EPA registered chemicals. Please see Section 15 for additional EPA information.

Appearance Brown granular solid

Physical State Solid

Odor Faint odor

Classification

Eye damage/eye irritation	Category 2
Carcinogenicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2

Signal Word

Warning

Hazard Statements

Causes serious eye irritation
Suspected of causing cancer
May cause damage to organs through prolonged or repeated exposure



Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Diuron	330-54-1	38.8 - 41.2
Bromacil	314-40-9	38.8 - 41.2

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

- General Advice** When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.

- Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention/advice.

- Skin Contact** IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Seek immediate medical attention/advice.

- Inhalation** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen if breathing is difficult. If breathing has stopped, call 911, give artificial respiration. Seek medical advice.

Ingestion Immediately call a poison center or doctor/physician. DO NOT induce vomiting. If conscious, drink 8-10 oz. of water promptly. Never give anything by mouth to an unconscious person. Obtain medical attention. Do not induce vomiting unless directed by medical personnel.

Most important symptoms and effects

Symptoms May cause mild eye irritation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray (fog). Dry chemical. Foam. Carbon dioxide (CO₂).

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Not determined.

Hazardous Combustion Products None known.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate area of unprotected personnel. Remain upwind of fire to avoid hazardous vapors and decomposition products. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Wear protective clothing as described in Section 8 of this safety data sheet. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

Environmental Precautions Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Pick up material with non-sparking shovel or explosion proof vacuum cleaner. Never return spills in the original containers for re-use. Pick up and transfer to properly labeled containers. If spill area is on ground near valuable plants or trees, remove top 2 inches of soil after initial clean up.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling. Do not contaminate water, food or feed by storage, disposal or by cleaning equipment. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep out of the reach of children. Store away from incompatible materials. Protect from excessive heat. Store locked up. Keep/store only in original container. Store at ambient conditions.

Incompatible Materials

Potassium permanganate.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Bromacil 314-40-9	TWA: 10 mg/m ³	(vacated) TWA: 1 ppm (vacated) TWA: 10 mg/m ³	TWA: 1 ppm TWA: 10 mg/m ³
Diuron 330-54-1	TWA: 10 mg/m ³	(vacated) TWA: 10 mg/m ³	TWA: 10 mg/m ³

Appropriate engineering controls

Engineering Controls

Please refer to the product label. Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Use splash goggles or face shield when contact may occur.

Skin and Body Protection

Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Viton or other impervious gloves are required. Long sleeve shirt, trousers, and safety shoes.

Respiratory Protection

Ensure adequate ventilation, especially in confined areas. Wear an appropriate NIOSH/MSHA approved respirator if ventilation is inadequate.

General Hygiene Considerations

Wash hands before eating, drinking, smoking and using the toilet. Remove contaminated clothing promptly and wash thoroughly before reused.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State
Appearance
Color

Solid
Brown granular solid
Brown

Odor
Odor Threshold

Faint odor
Not determined

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	7.61 +/- 0.01	
Melting Point/Freezing Point	Not applicable	
Boiling Point/Boiling Range	Not determined	
Flash Point	Not applicable	
Evaporation Rate	Not applicable	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not applicable	
Lower Flammability Limit	Not applicable	
Vapor Pressure	Not established	
Vapor Density	Not determined	
Specific Gravity	Not determined	
Water Solubility	Not determined	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	
Bulk Density	0.565 g/ml (Pour); 0.614 g/ml (Tap)	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Extreme heat and open flames.

Incompatible Materials

Potassium permanganate.

Hazardous Decomposition Products

May include but are not limited to: oxides of carbon, oxides of phosphorous. Hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

- Eye Contact** Causes serious eye irritation.
- Skin Contact** Avoid contact with skin.
- Inhalation** Avoid breathing vapors or mists.
- Ingestion** Do not ingest.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Bromacil 314-40-9	= 641 mg/kg (Rat)	> 2500 mg/kg (Rat) > 5 g/kg (Rabbit)	-
Diuron 330-54-1	= 1017 mg/kg (Rat)	> 5 g/kg (Rat)	> 0.265 mg/L (Rat)

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Suspected of causing cancer.

Chemical Name	ACGIH	IARC	NTP	OSHA
Bromacil 314-40-9	A3			

*ACGIH (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen*

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Product Information (Numerical measures of toxicity)

Acute Oral LD50 (Rat): 2,300 mg/kg

Acute Dermal LD50 (Rabbit): >2,000 mg/kg

Acute Inhalation LC50 (Rat): >5.2 mg/L (4-hr)

Eye Irritation: Moderately irritating.

Dermal Irritation: Slightly irritating.

Dermal Sensitization: Not a skin sensitizer.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects. For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Bromacil is known to leach through soil and has been found in ground water as a result of normal field use. Users are advised not to apply in areas where soils are permeable, particularly where ground water is used for drinking water. Consult with the pesticide state lead agency for information regarding soil permeability and aquifer vulnerability in your area.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Bromacil 314-40-9		180 - 192: 96 h Pimephales promelas mg/L LC50 flow-through 32: 96 h Lepomis macrochirus mg/L LC50 static 30 - 40: 96 h Oncorhynchus mykiss mg/L LC50 static		

Diuron 330-54-1	0.022: 96 h Desmodesmus subspicatus mg/L EC50 0.036: 72 h Desmodesmus subspicatus mg/L EC50 static 0.1: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 0.0007: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	13.4 - 15: 96 h Pimephales promelas mg/L LC50 flow-through 13.4 - 15: 96 h Pimephales promelas mg/L LC50 static 2.3 - 3.3: 96 h Lepomis macrochirus mg/L LC50 static 4: 96 h Lepomis macrochirus mg/L LC50 1.5 - 2.54: 96 h Oncorhynchus mykiss mg/L LC50 static 14.7: 96 h Oncorhynchus mykiss mg/L LC50 2.9: 96 h Cyprinus carpio mg/L LC50	EC50 = 16.38 mg/L 5 min	1.4: 48 h Daphnia magna mg/L EC50 6.3 - 13: 48 h Daphnia magna mg/L EC50 Static
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Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Diuron 330-54-1	2.82
Bromacil 314-40-9	2.11

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinse is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or Hazardous Waste representative at the nearest EPA regional office. Never place any unused product down an indoor or outdoor drain. Do not contaminate water, food or feed by disposal.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

DOT

Package size less than 250 Lbs. (113 Kg.): Not regulated

UN/ID No

UN3077

Proper Shipping Name

Environmentally hazardous substance, solid, n.o.s. (Diuron)

Hazard Class

9

Packing Group

III

Reportable Quantity (RQ)

Packages > 250 lb.

Marine pollutant

Yes

IATA

UN/ID No

UN3077

Proper Shipping Name

Environmentally hazardous substance, solid, n.o.s. (Diuron)

Hazard Class

9

Packing Group III
Marine Pollutant Yes

IMDG

UN/ID No UN3077
Proper Shipping Name Environmentally hazardous substance, solid, n.o.s. (Diuron)
Hazard Class 9
Packing Group III
Marine Pollutant Yes

15. REGULATORY INFORMATION

International Inventories

TSCA All ingredients are listed or exempt from listing on Chemical Substance Inventory

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Diuron 330-54-1	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard No
Sudden Release of Pressure Hazard No
Reactive Hazard No

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Bromacil - 314-40-9	314-40-9	38.8 - 41.2	1.0
Diuron - 330-54-1	330-54-1	38.8 - 41.2	1.0

CWA (Clean Water Act)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Diuron 330-54-1 (38.8 - 41.2)	100 lb			X

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Diuron - 330-54-1	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Bromacil 314-40-9	X	X	X

Diuron 330-54-1	X	X	X
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EPA Pesticide Registration Number 66222-173

EPA Statement

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Pesticide Label

Signal Word: Caution

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing.

Difference between SDS and EPA pesticide label

Signal Word	Caution	Warning
Acute toxicity - Oral	Harmful if swallowed	N/A
Acute toxicity - Dermal	Harmful if absorbed through the skin	N/A
Serious eye damage/eye irritation	Causes moderate eye irritation	Causes serious eye irritation
Carcinogenicity	N/A	Suspected of causing cancer
STOT - repeated exposure	N/A	May cause damage to organs through prolonged or repeated exposure

16. OTHER INFORMATION

NFPA	Health Hazards	Flammability	Instability	Special Hazards
	3	1	0	None
HMIS	Health Hazards	Flammability	Physical Hazards	Personal Protection
	3	1	0	See section 8

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet